

# MDHHS Guidance for Local Public Health: Diagnostic Testing and Case Reporting for Zika Virus in at Risk Individuals—**Updated 3/31/2016**

## Criteria for Diagnostic Testing of Potentially Exposed Individuals

Testing is currently indicated for the following individuals:

- **Pregnant women** who have:
  - History of travel to an area with ongoing Zika virus transmission (<http://www.cdc.gov/travel/notices/>)
    - And have clinical illness consistent with Zika virus infection (**one** or more of the following: fever, rash, joint pain, red irritated eyes) within two weeks of travel
    - Or have no symptoms, and are **within 2-12 weeks after their return from travel**
  - Had sex without a condom with a male partner with possible Zika virus exposure
    - And develops at least **one** of the following signs of Zika virus disease: fever, rash, joint pain, red irritated eyes
    - Or her male partner has been diagnosed with Zika virus disease or developed a clinical illness consistent with Zika virus disease (**one** or more of the following: fever, rash, joint pain, red irritated eyes)

[Testing is not currently recommended for pregnant women with possible sexual exposure to Zika virus if both partners are asymptomatic.]

- **Others** who have a history of travel to an area with ongoing Zika virus transmission and have a clinical illness consistent with Zika virus infection (**one** or more of the following: fever, rash, joint pain, red irritated eyes) within two weeks of travel

## Specimen Requirements for Diagnostic Testing:

For detailed instructions, visit [http://www.michigan.gov/emergingdiseases/0,4579,7-186--377958--\\_00.html](http://www.michigan.gov/emergingdiseases/0,4579,7-186--377958--_00.html)

- Serum or CSF
- Amniotic fluid, urine, tissue and other specimens may be submitted to assess the utility of these samples to detect virus, contact MDHHS Epi at 517-335-8165 for instructions on specimen collection and handling

## Diagnostic Testing Methodologies:

- **PCR:** available on samples collected  $\leq 7$  days of symptom onset, may be useful for studies on non-serum specimens (ex: tissue, urine, amniotic fluid)
- **IgM detection:** available for samples collected  $> 7$  days after symptom onset
- **Plaque Reduction Neutralization Test (PRNT):** Cell culture test performed on samples where cross-reaction with other associated mosquito-borne diseases is detected or results are inconclusive

## Required Test Requisition Forms:

- **Zika Virus Supplemental Questionnaire** (see Appendix 1) **must** be completed for each specimen

- **CDC form 50.34**, downloaded from the MDHHS website ([http://www.michigan.gov/documents/mdch/HUMAN\\_form-50-34\\_410210\\_7.pdf](http://www.michigan.gov/documents/mdch/HUMAN_form-50-34_410210_7.pdf))
  - This form works best when opened in Internet Explorer
  - MUST be completed electronically, then printed to accompany specimen
  - Under test order name, choose Arbovirus Serology or Arbovirus Molecular Detection (see note\* below regarding test selection)
  - On the second page, in the box marked “Brief Clinical Summary” write “Zika Virus” in the “Suspected Agent” box after you print the form for shipping, or type “Suspect Zika” virus in the box on the 2<sup>nd</sup> page marked “Brief Clinical Summary”

\*NOTE: If the patient’s onset of illness is within 7 days of the specimen collection date, then molecular testing is an option. If it is more than 7 days, serologic testing only will be performed.

- **MDHHS Microbiology/Virology Test Request Form** (DCH-0583) ([http://www.michigan.gov/documents/DCH-0583TEST\\_REQUEST\\_7587\\_7.pdf](http://www.michigan.gov/documents/DCH-0583TEST_REQUEST_7587_7.pdf))
  - Complete the top of the form with the **Submitter** information
  - At the bottom of the form:
    - Indicate “Specimen Source”
    - Under “Tests that Require MDHHS Approval”, check the “Other” box and write in “Zika virus”

### **Specimen Shipping Instructions**

- **Refrigerate serum or CSF and send with an ice pack** (For other types of samples, contact MDHHS at 517-335-8165 for instructions)
- Ship to MDHHS Bureau of Laboratories overnight
  - MDHHS Specimen Shipping information: [http://www.michigan.gov/mdhhs/0,5885,7-339-71551\\_2945\\_5103\\_5278-14793--,00.html](http://www.michigan.gov/mdhhs/0,5885,7-339-71551_2945_5103_5278-14793--,00.html)
  - Mailing Address:  
**Michigan Department of Health and Human Services  
Bureau of Laboratories  
3350 North Martin Luther King Jr. Blvd.  
Building 44 Room 155  
P.O. Box 30035  
Lansing, Michigan 48909**
  - For additional questions about shipping specimens to MDHHS, contact the DASH unit at 517-335-8059

### **Case Reporting:**

- **LHDs should report all suspect Zika virus cases for which testing is approved to MDHHS**
  - Enter the case in MDSS using the “Unusual Outbreak or Occurrence” form
  - Under Outbreak Associated, mark “yes”
  - Enter “ZIKA 2016” in the Outbreak Identifier box
- Fax a copy of the completed “Zika Virus Supplemental Questionnaire” for each patient to MDHHS at 517-335-8263

**Results:**

- Turnaround time is hard to predict, but should improve as testing becomes more widely available
- Negative results may be available sooner (within 2 weeks), other results may take longer due to the need to perform additional studies (4-6 weeks)
- As results are received by the MDHHS Bureau of Laboratories, submitters will either receive a faxed copy to the fax number registered in STARLIMS, or a copy will be mailed to the address provided in the "Submitter" portion on the CDC form
- As results are received by the MDHHS epidemiologist, the local health department will be immediately notified and copies will also be attached to patient case report forms in MDSS

Below are links to the CDC guidance documents for assessing Zika risk in pregnant travelers, or their infants, and risk for sexual transmission. Please share these with any providers who do not already have them.

- **For Obstetrical Care Providers**
  - Feb 12, 2016: Interim Guidelines for Health Care Providers Caring for Pregnant Women and Women of Reproductive Age with Possible Zika Virus Exposure — United States, 2016: <http://www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6505e2.pdf>
    - Associated FAQ: <http://www.cdc.gov/zika/hc-providers/qa-pregnant-women.html>
  - March 25, 2016: Interim Guidelines for Health Care Providers Caring for Women of Reproductive Age with Possible Zika Virus Exposure-United States, 2016: <http://www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6512e2er.pdf>
  - Preventing Transmission of Zika Virus in Labor and Delivery Settings Through Implementation of Standard Precautions — United States, 2016: <http://www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6511e3.pdf>
- **For Pediatric Healthcare Providers**
  - Interim Guidelines for Health Care Providers Caring for Infants and Children with Possible Zika Virus Infection — United States, February 2016: <http://www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6507e1.pdf>
    - Associated FAQ: <http://www.cdc.gov/zika/hc-providers/qa-pediatrician.html>
- **Sexual Transmission**
  - CDC Interim Guidelines for the Prevention of Sexual Transmission of Zika Virus-United States, 2016: <http://www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6512e3er.pdf>
  - Zika and Sexual Transmission: <http://www.cdc.gov/zika/transmission/sexual-transmission.html>
  - Women and their partners who are thinking about pregnancy: <http://www.cdc.gov/zika/pregnancy/thinking-about-pregnancy.html>